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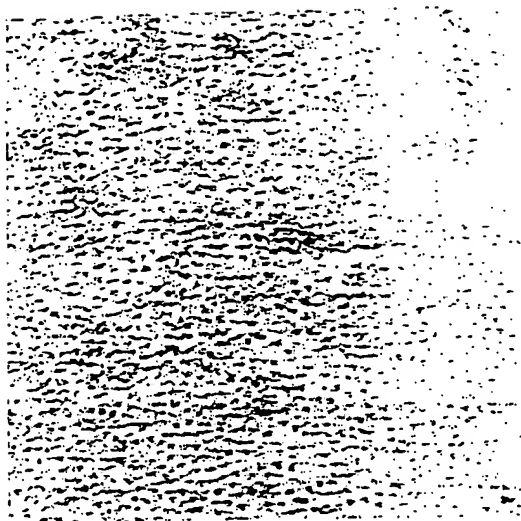


FIG. 1A

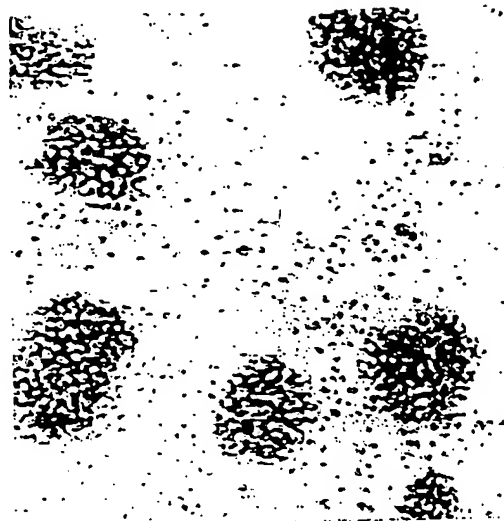


FIG. 1B

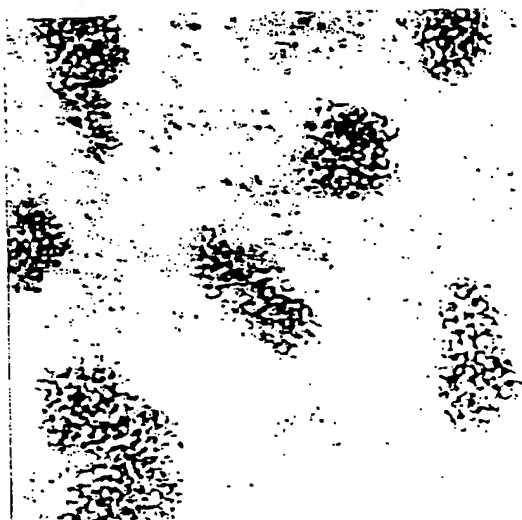


FIG. 1C

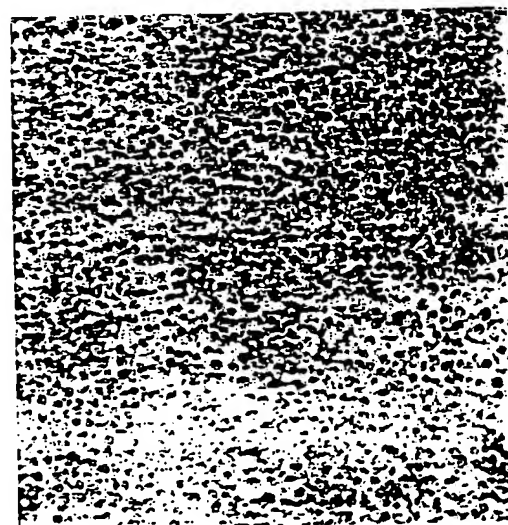
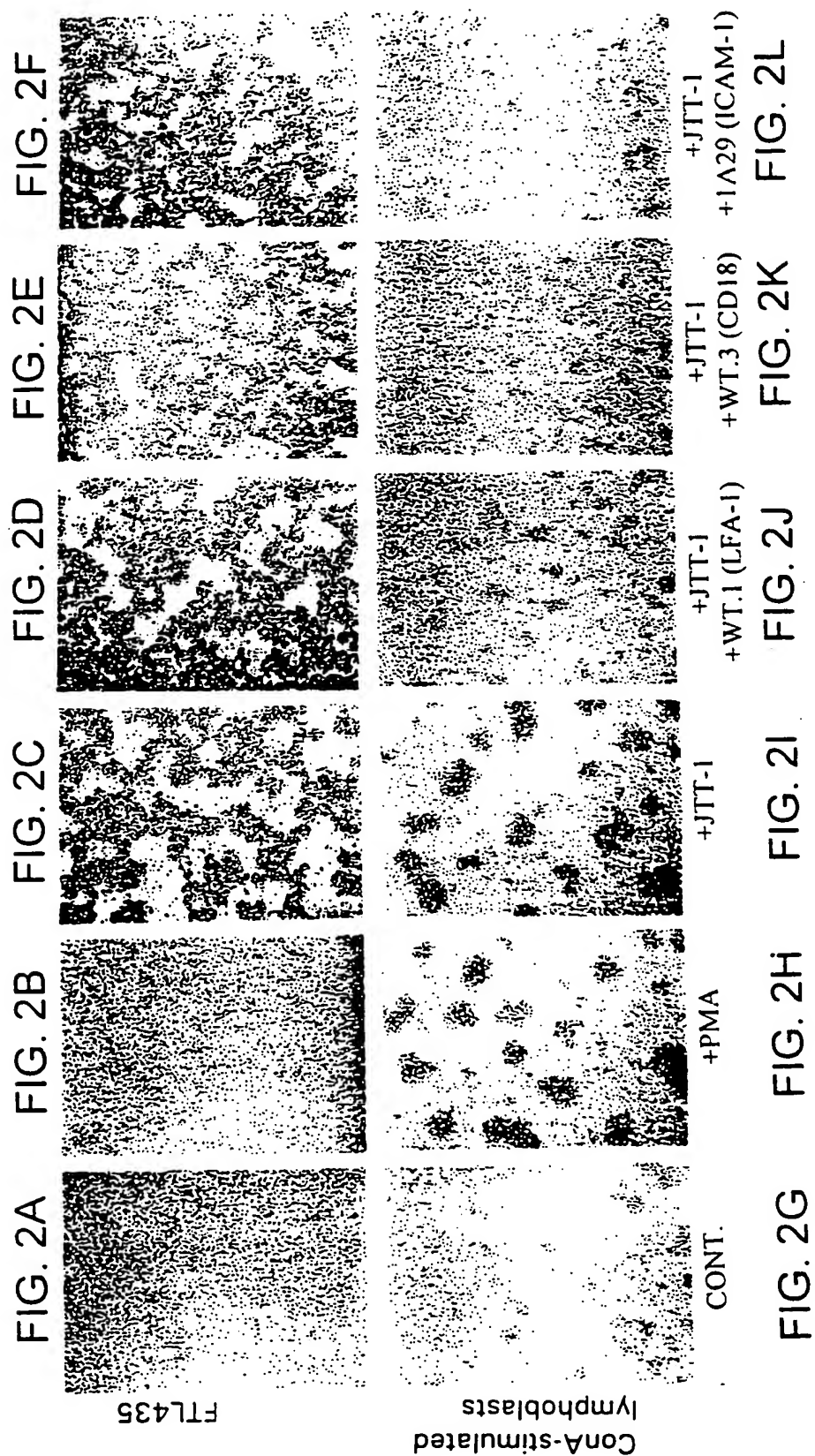


FIG. 1D



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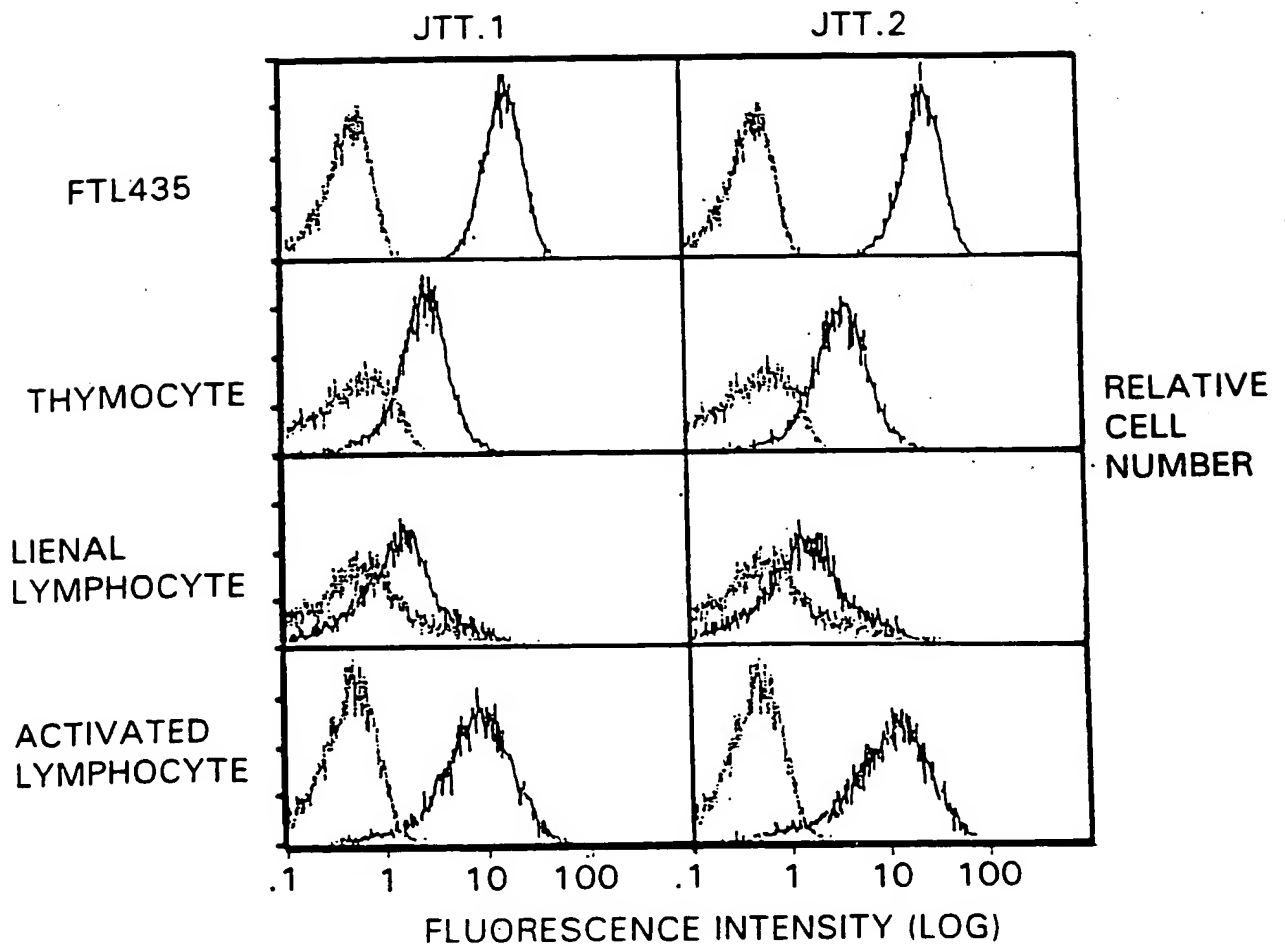
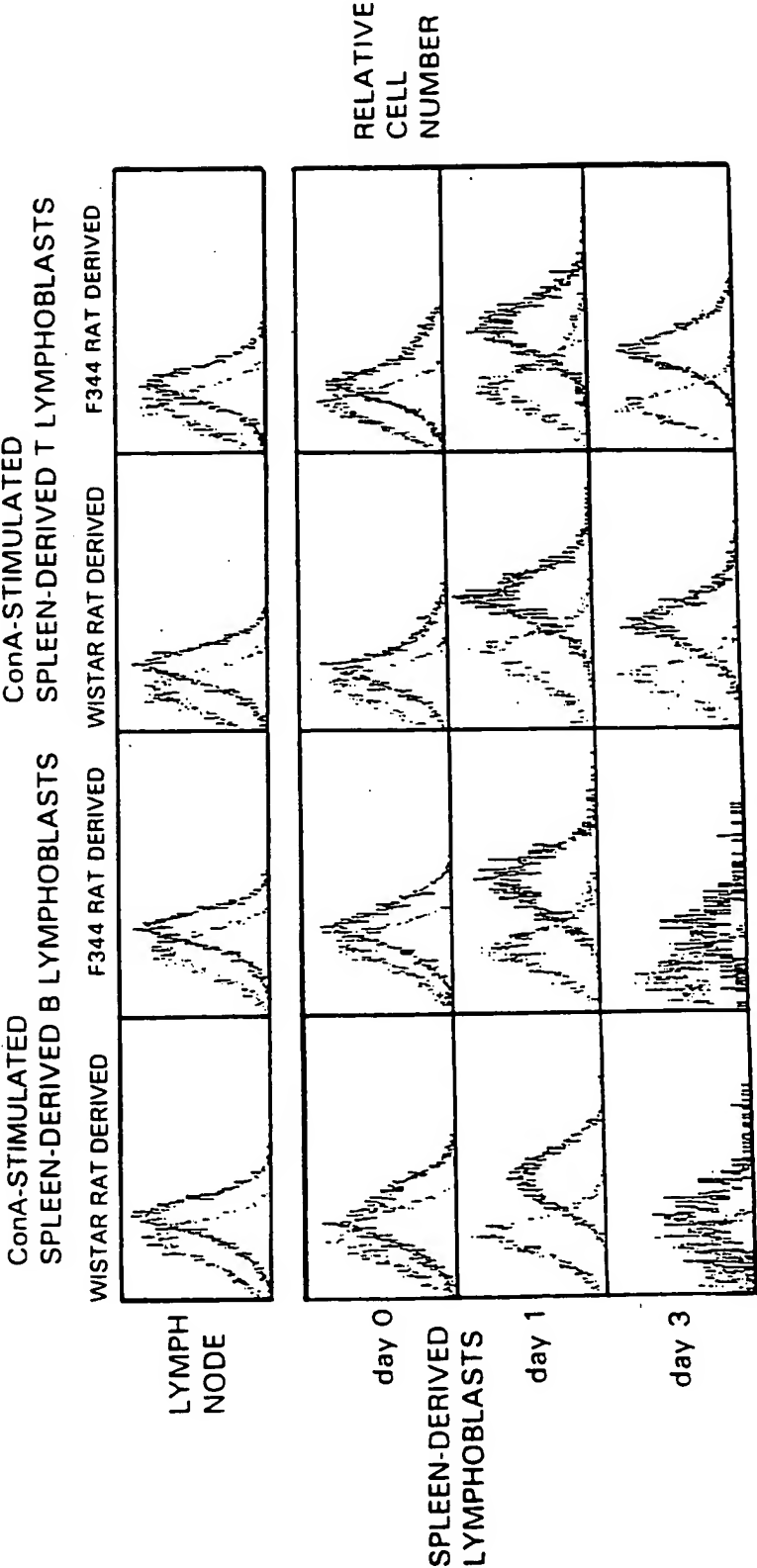
CELL SURFACE MOLECULE MEDIATING CELL ADHESION
AND SIGNAL TRANSMISSION

FIG. 3



FLUORESCENCE INTENSITY (LOG)

FIG. 4

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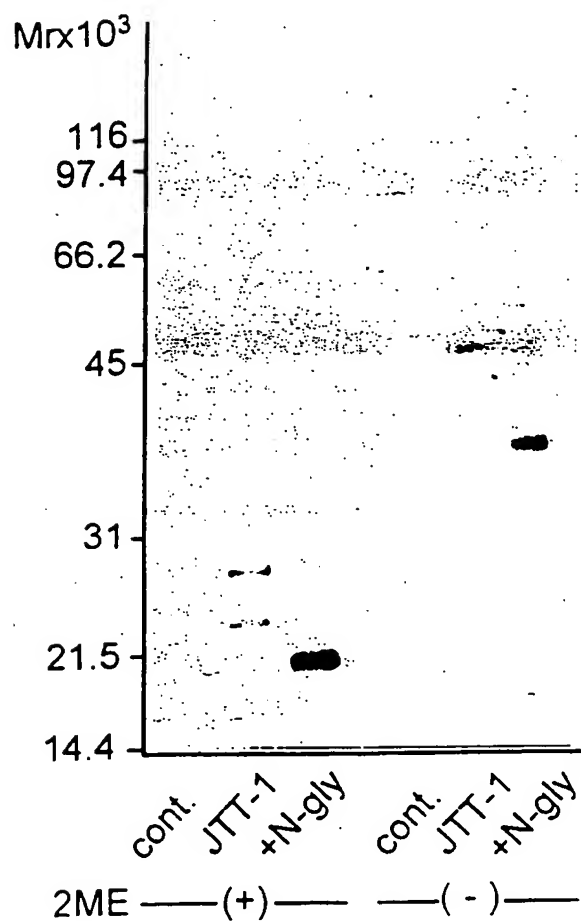
CELL SURFACE MOLECULE MEDIATING CELL ADHESION
AND SIGNAL TRANSMISSION

FIG. 5

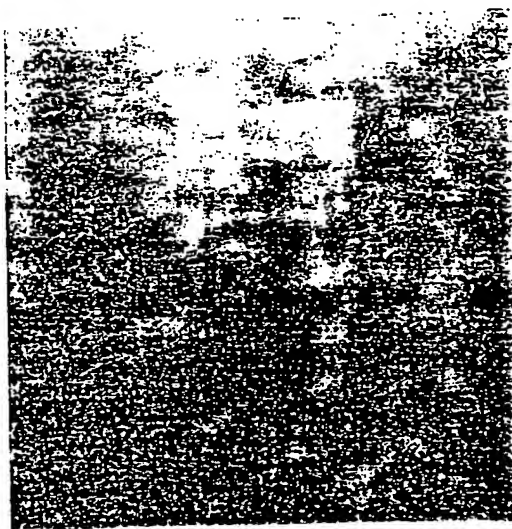


FIG. 6A

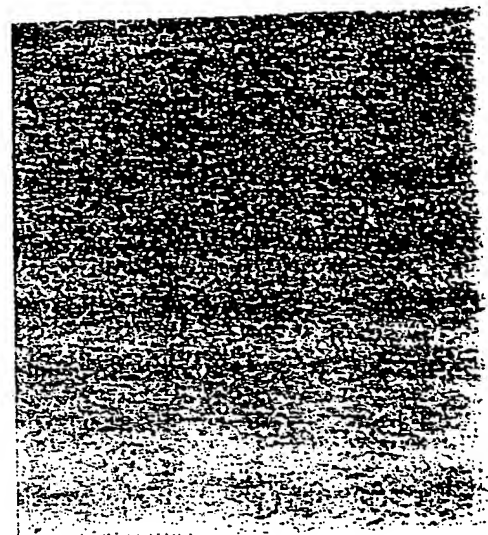


FIG. 6B

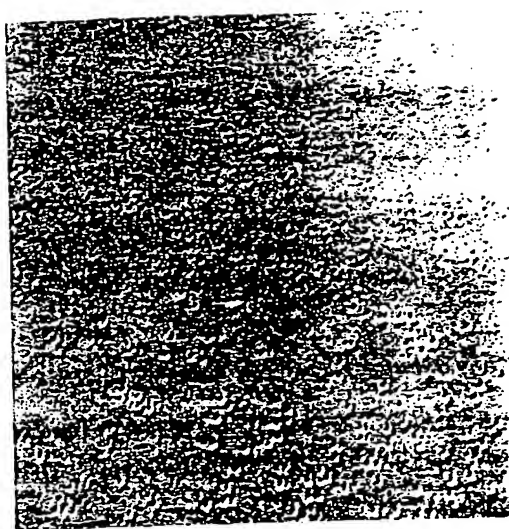


FIG. 6C

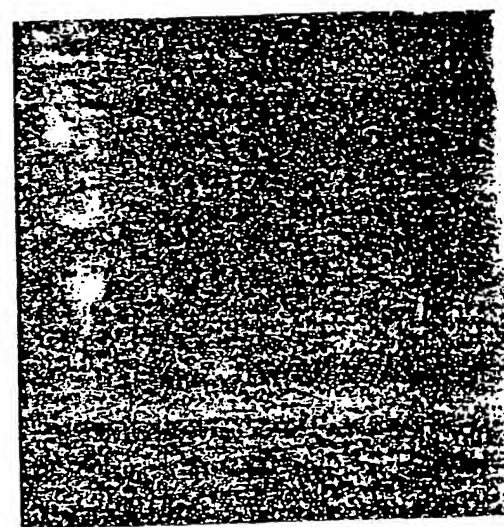


FIG. 6D

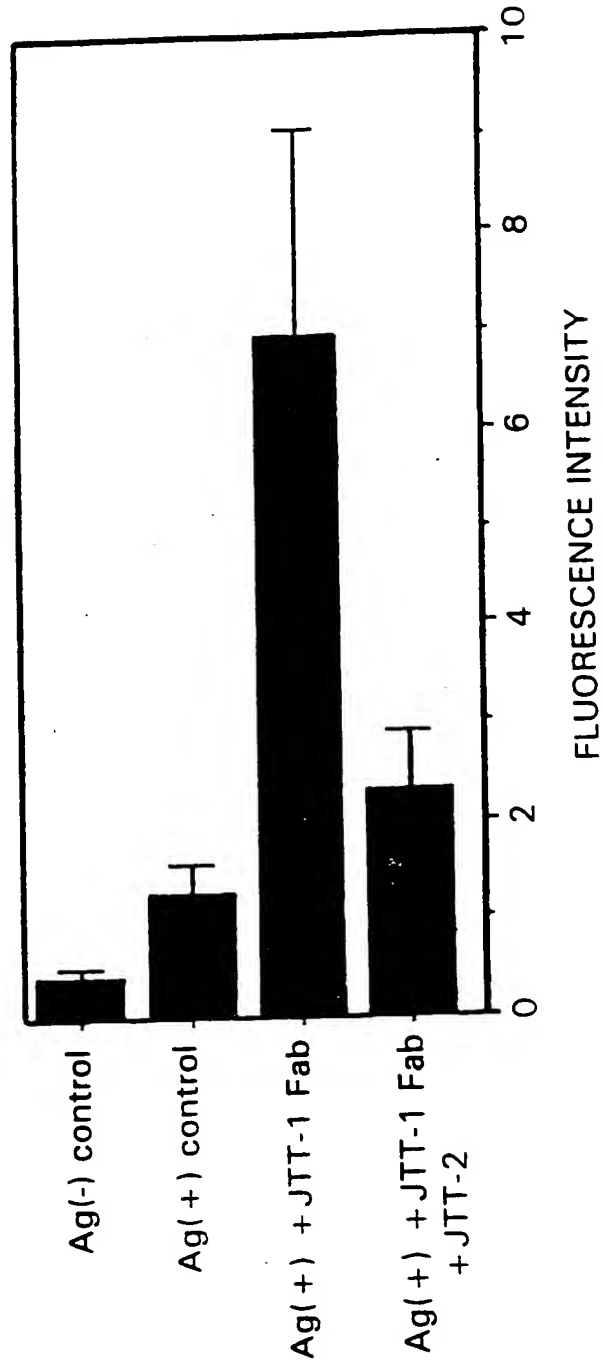


FIG. 7

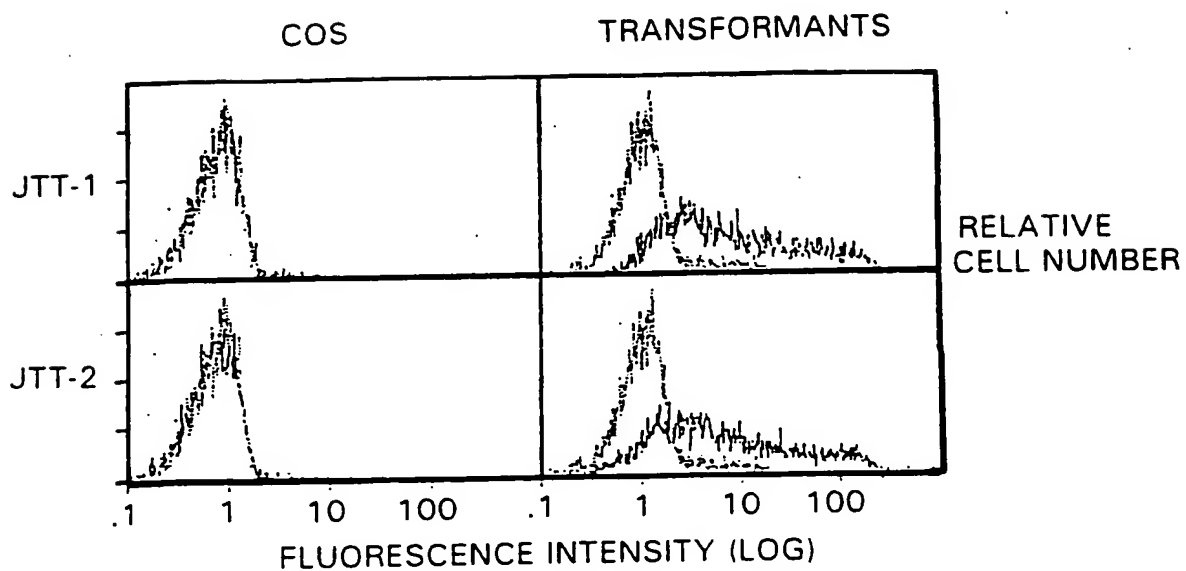


FIG. 8

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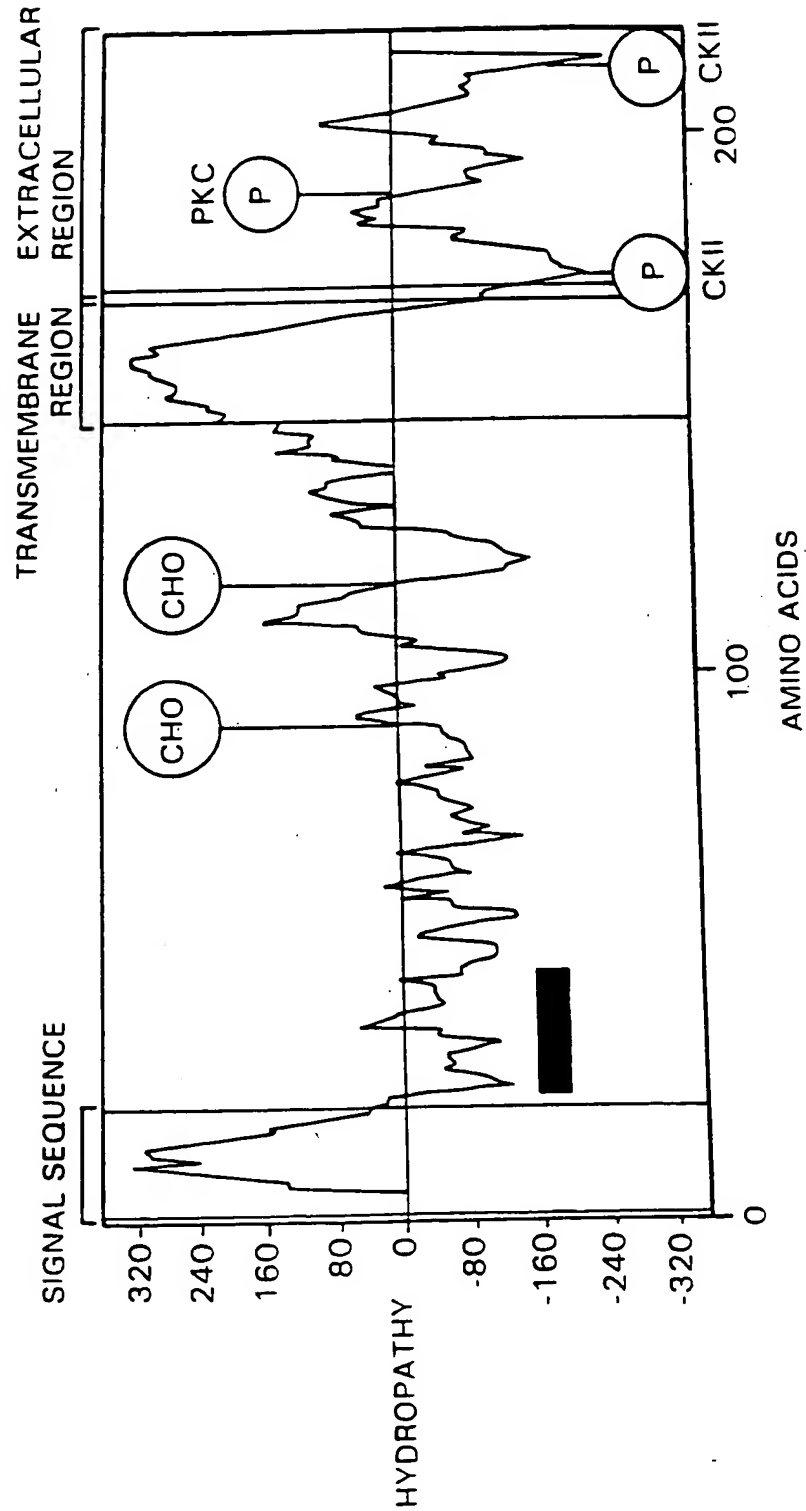
CELL SURFACE MOLECULE MEDIATING CELL ADHESION
AND SIGNAL TRANSMISSION

FIG. 9

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CELL SURFACE MOLECULE MEDIATING CELL ADHESION
AND SIGNAL TRANSMISSION

human	M K S G L W Y F F L	F C L R I K V L T G E	I N G S A N Y E M F I F H N G G V Q I	L C K Y P D I V Q Q	50
rat	M K P Y F S C V F V	F C F L I K L L T G E	E L N D L A N H R M F S F H D G G V Q I	S C N Y P E T V Q Q	50
rat mutant	M K P Y F S C V F V	F C F L I K L L T G E	E L N D L A N H R M F S F H D G G V Q I	S C N Y P E T V Q Q	50
mouse	M K P Y F C H V F V	F C F L I R L L T G E	E I N G S A D H R M F S F H N G G V Q I	S C K Y P E T V Q Q	50
consensus	M K P Y F . . V F V	F C F L I K L L T G E	. . . A N H R M F S F H . G G V Q I	S C . Y P E T V Q Q	50
human	F K M Q L L K G G Q	I L C D L T K T K G S G N T	T V S I K S L K F C H S Q L S N N S V S F F L Y N L D	100	
rat	L K M Q L L F K D R E	V L C D L T K T K G S G N T	T V S I K N P M S C C P Y Q L S N N S V S F F L Y N L D	100	
rat mutant	L K M Q L L F K D R E	V L C D L T K T K G S G N T	T V S I K N P M S C C P Y Q L S N N S V S F F L Y N L D	100	
mouse	L K M R L L F R E R E	V L C E L T K T K G S G N A	V S I K N P M L L C L Y H L S N N S V S F F L Y N L D	100	
consensus	L K M Q L L F K . R E	V L C D L T K T K G S G N T	T V S I K N P M . C . Y Q L S N N S V S F F L Y N L D	100	
human	H S H A N Y Y F C N	L S I F D P P P P F K	- V T L T G G Y L L H I Y E S Q L C C C Q L K F W L P I G C A A	149	
rat	S S Q G S Y F L C S	L S I F D P P P P F Q	E K N L S G G Y L L I Y E S Q L C C C Q L K L W L P V V G C A A	150	
rat mutant	S S Q G S Y F L C S	L S I F D P P P P F Q	E K N L S G G Y L L I Y E S Q L C C C Q L K L W L P V V G C A A	150	
mouse	S S Q G S Y Y F C S	L S I F D P P P P F Q	E R N L S G G Y L L I Y E S Q L C C C Q L K L W L P V V G C A A	150	
consensus	S S Q G S Y . . C S	L S I F D P P P P F Q	E . N L S G G Y L . I Y E S Q L C C C Q L K L W L P V V G C A A	150	
human	F V V V C I L G C I	L I C W L T K K K Y	S S S V H D P N S E Y M F M R A V N T A	199	
rat	F V A A L L F G C I	F I V W F A K K K Y	R S S S V H D P N S E Y M F M A A V N T A	200	
rat mutant	F V A A L L F G C I	F I V W F A K K K Y	R S S S V H D P N S E Y M F M A A V N T A	200	
mouse	F V V V L L F G C I	L I I W F S K K K Y	G S S S V H D P N S E Y M F M A A V N T A	200	
consensus	F V . . L L F G C I	. I . W F . K K K Y	. S S S V H D P N S E Y M F M A A V N T A	200	
human	- - - - -	- - - - -	- - - - -	199	
rat	- - - - -	- - - - -	- - - - -	200	
rat mutant	L R A L G R G E H S	S C Q D R N	- - - - -	216	
mouse	- - - - -	- - - - -	- - - - -	200	
consensus	- - - - -	- - - - -	- - - - -	216	

FIG. 10

CELL SURFACE MOLECULE MEDIATING CELL ADHESION AND SIGNAL TRANSMISSION

JTT1	M	-	-	-	-	-	K S G L	-	-	-	W	-	Y F F L	F C L R	I K V L T G E I N G	S A N Y E M F I F H	34
CD28	M	-	-	-	-	-	R L L L A	-	-	-	-	-	L N L F	- P S	I Q V T G N K I L V	K Q S P M L V A Y D	33
CTLA4	M	A C L G F Q R H K	A O L N L A A R T W	P C T L L F F L L F	-	-	-	-	-	-	-	-	-	-	I P V F C K A M H V	A Q P A V V L A S S	50
consensus	M	-	-	-	-	-	L	-	-	-	W	-	-	-	I . V	. O A . .	50
JTT1	N	G G V Q I L C K Y	-	-	-	-	P D I V Q Q F K	M Q L L K G G Q I L	-	-	-	-	-	-	C D L T K T	K G S G N T V S I K	78
CD28	N	A V - N L S C K Y	S Y N L F S R E F R	A S L H K G L D S A	V E V -	-	C V V Y G N	Y S Q Q L O V Y S K	81								
CTLA4	R	G I A S F V C E Y	A S P G K A T E V R	V T V L R Q A D S Q	V T E V C A A -	- T	Y M T G N E L T F L	98									
consensus	N	G C K Y	. . P . . . E F R	. . L L K G . D S .	V . . - C T Y . . G N . V . . K	100										
JTT1	S	L K F C H S Q L S	N N S V S F F L Y N	L D H S H A N Y Y F	C N L S I F D P P P	F - - K V T L T G G	126										
CD28	T	G F N C D G K L G	N E S V T F Y L Q N	L Y V N Q T D I Y F	C K I E V M Y P P P	Y L D N E K S N G T	131										
CTLA4	D	D S I C T G T S S	G N Q V N L T I Q G	L R A M D T G L Y I	C K V E L M Y P P P	Y Y - L G I G N G T	147										
consensus C . G . L S	N N S V . F . L Q N	L T . . Y F	C K . E . M Y P P P	Y N G T	150										
JTT1	Y	L H I Y E S Q L C	C Q L K F	-	-	-	-	-	-	-	-	-	-	-	-	-	167
CD28	I	H V K G K H L C	P S P L F P G P S K	-	-	-	-	-	-	-	-	-	-	-	-	-	181
CTLA4	Q	I Y V I D P E P C	P D S D F	-	-	-	-	-	-	-	-	-	-	-	-	-	191
consensus	.	I H V L C	P F	-	-	-	-	-	-	-	-	-	-	-	-	-	200
JTT1	K	Y S S S V H D P N	G E Y M F M R A V N	T A K K S R	-	-	-	-	-	-	-	-	-	-	-	-	199
CD28	K	R S - - R L L H	S D Y M N M T P R R	P G P T R K H Y Q P	Y A P P R D F A A Y	R S	220										
CTLA4	K	R S - - P L T T	G V Y V K M P P T E	P E - C E K Q F O P	Y - - - - F I - P I	N -	223										
consensus	K	R S - - . L . .	G . Y M . M . P . . P K Q P Y - - . . . D F	-	-	-	242										

FIG. 11

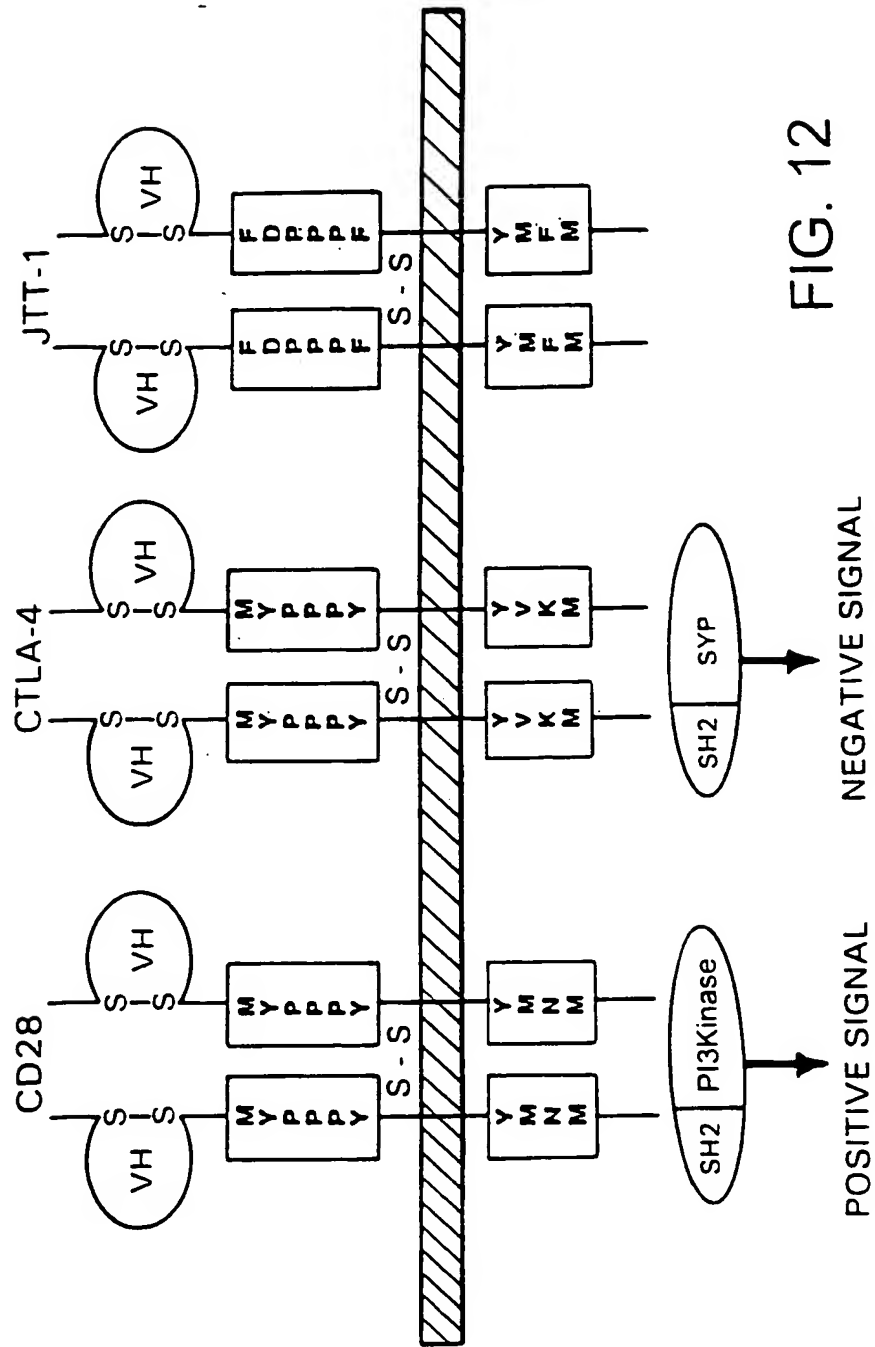


FIG. 12

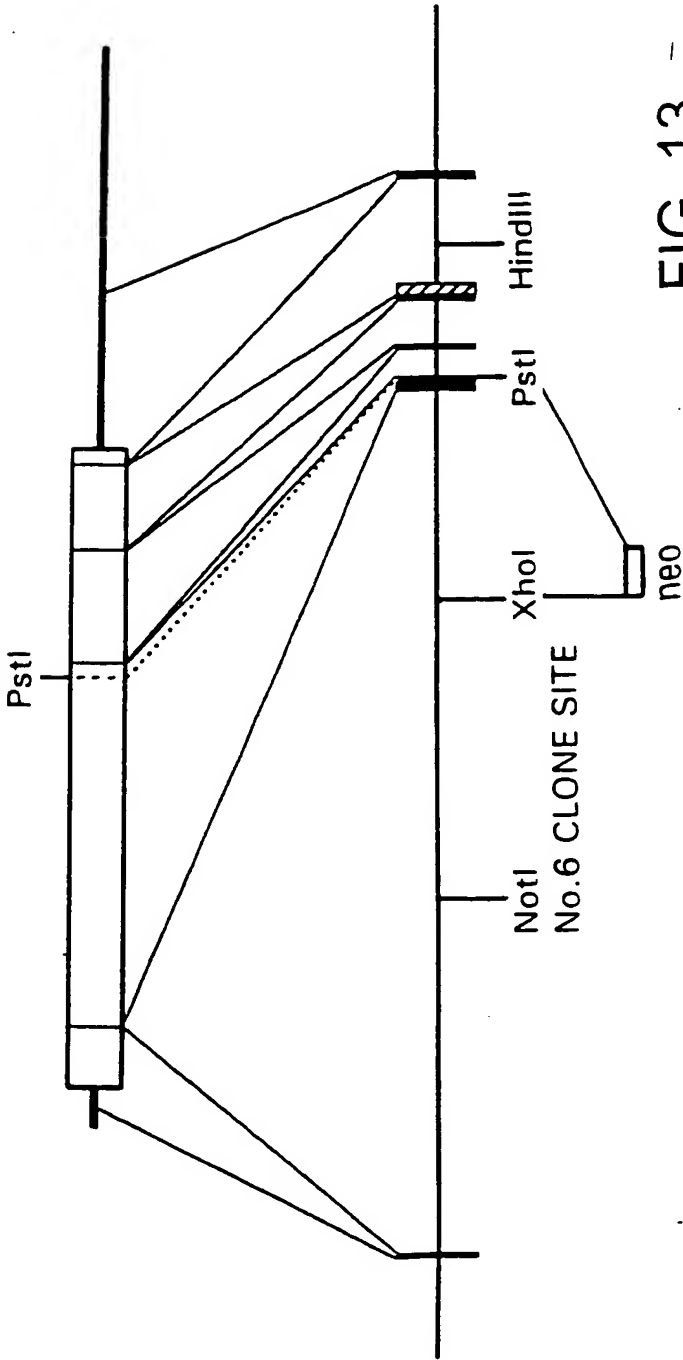


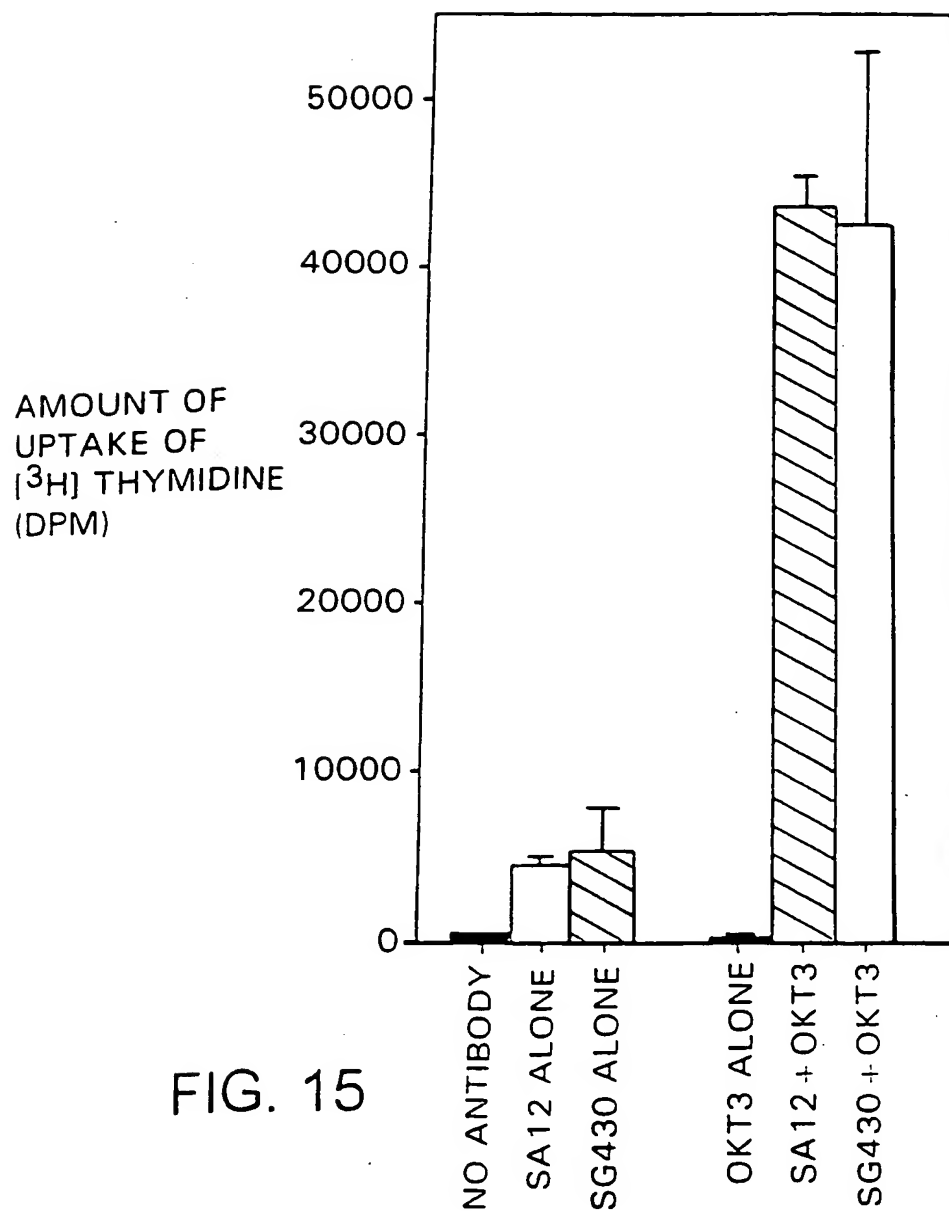
FIG. 13

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CELL SURFACE MOLECULE MEDIATING CELL ADHESION
AND SIGNAL TRANSMISSION

rat	50	
rat mutant	50	
consensus	50	
		<div> <div> MKPYFSCVFV FCFLIKLLTG ELNDLANHRM FSFHDGGVQI SCNYPETVQQ</div> <div> MKPYFSCVFV FCFLIKLLTG ELNDLANHRM FSFHDGGVQI SCNYPETVQQ</div> <div> MKPYFSCVFV FCFLIKLLTG ELNDLANHRM FSFHDGGVQI SCNYPETVQQ</div> </div>
rat	100	
rat mutant	100	
consensus	100	
		<div> <div>LKMQLFKDRE VLCDLTKTKG SGNIVSIKNP MSCPYQLSNN SVSFFLDNAD</div> <div> LKMQLFKDRE VLCDLTKTKG SGNIVSIKNP MSCPYQLSNN SVSFFLDNAD</div> <div> LKMQLFKDRE VLCDLTKTKG SGNIVSIKNP MSCPYQLSNN SVSFFLDNAD</div> </div>
rat	150	
rat mutant	150	
consensus	150	
		<div> <div>SSQGSYFLCS LSIFDPPPFQ EKNLSGGYLL IYESQLCCQL KLWLPVGCAA</div> <div> SSQGSYFLCS LSIFDPPPFQ EKNLSGGYLL IYESQLCCQL KLWLPVGCAA</div> <div> SSQGSYFLCS LSIFDPPPFQ EKNLSGGYLL IYESQLCCQL KLWLPVGCAA</div> </div>
rat	200	
rat mutant	200	
consensus	200	
		<div> <div>FVAALLFGCI FIVWFAKKKY RSSVHDPNSE YMFMAAVNTN KKSRLAG MTS</div> <div> FVAALLFGCI FIVWFAKKKY RSSVHDPNSE YMFMAAVNTN KKSRLAG TAP</div> <div> FVAALLFGCI FIVWFAKKKY RSSVHDPNSE YMFMAAVNTN KKSRLAG ...</div> </div>
rat	200	
rat mutant	216	
consensus	216	
		<div> <div>-----</div> <div> LRALGRGEHS SCQDRN</div> <div></div> </div>

FIG. 14



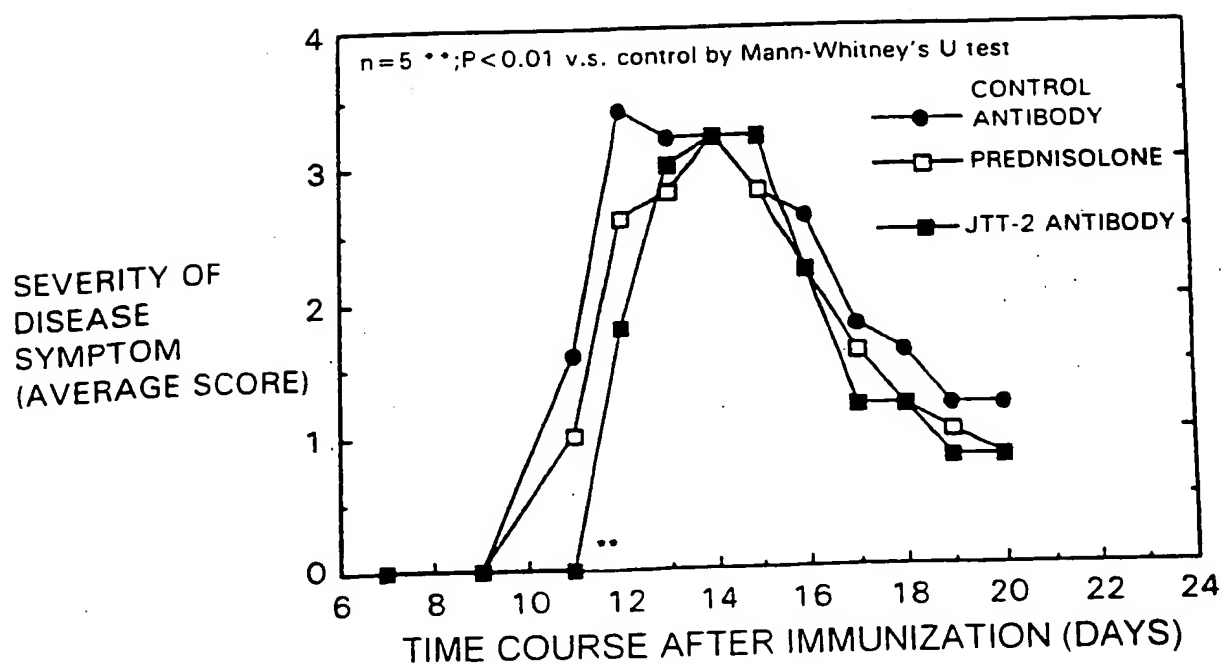


FIG. 16

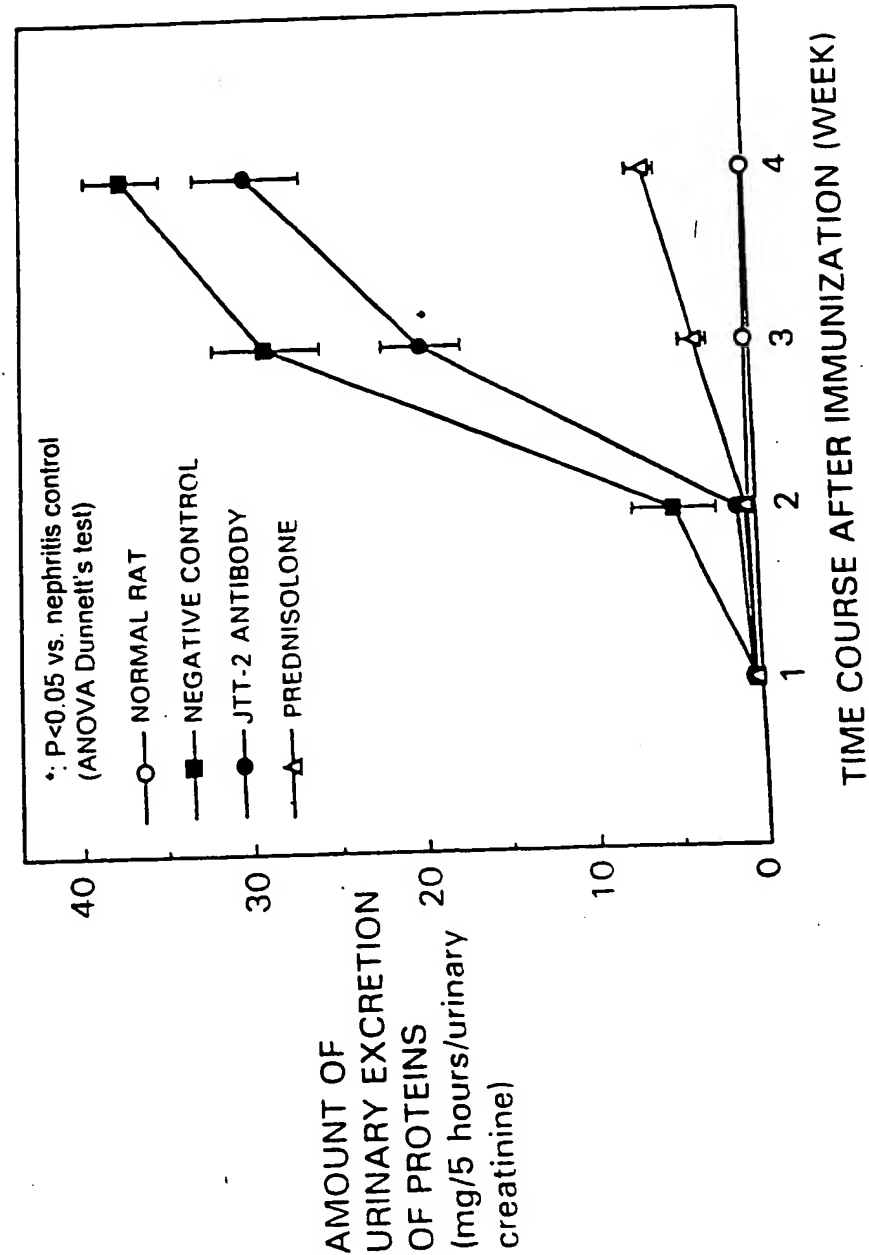


FIG. 17

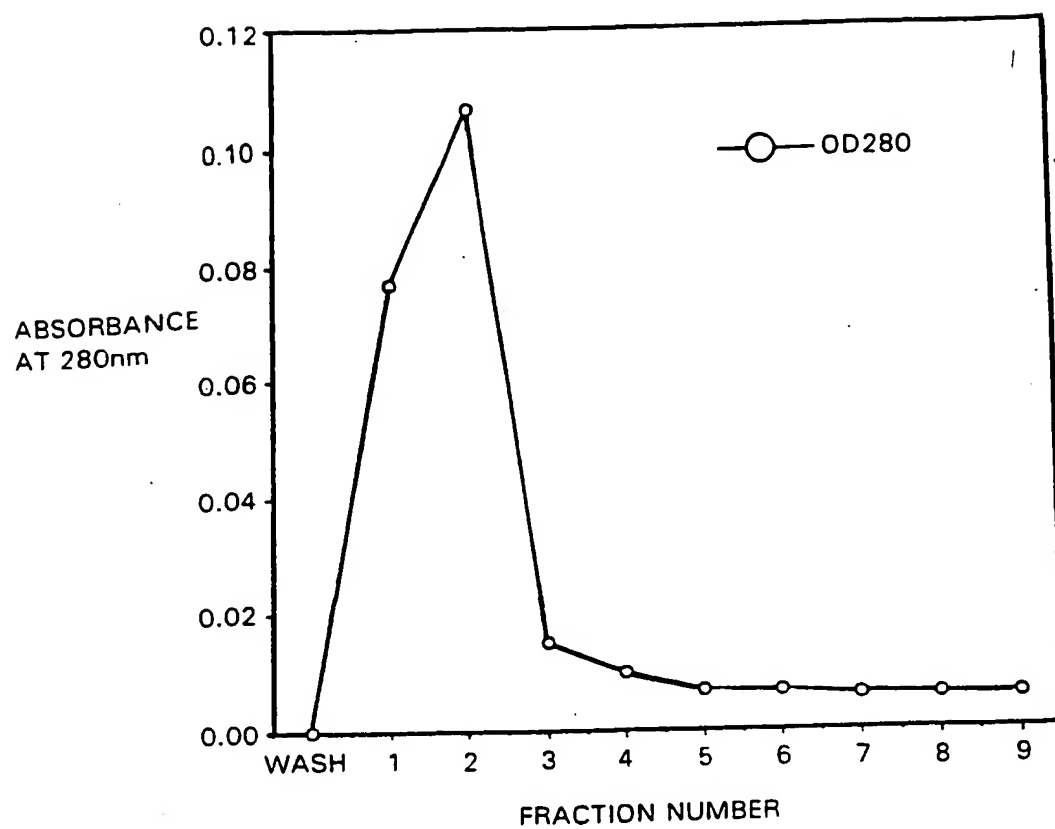


FIG. 18

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CELL SURFACE MOLECULE MEDIATING CELL ADHESION
AND SIGNAL TRANSMISSION

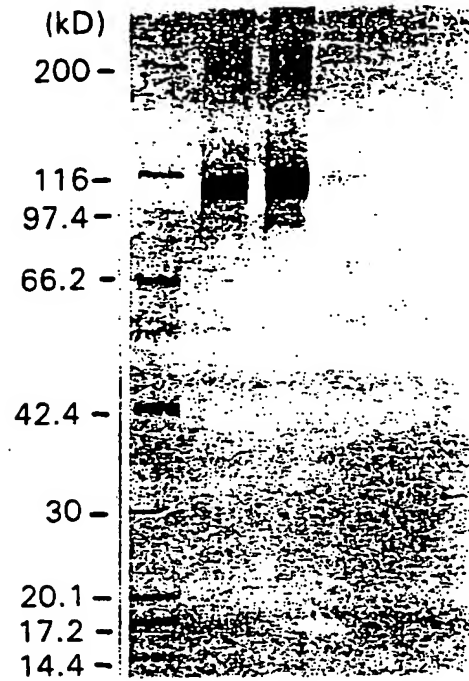


FIG. 19

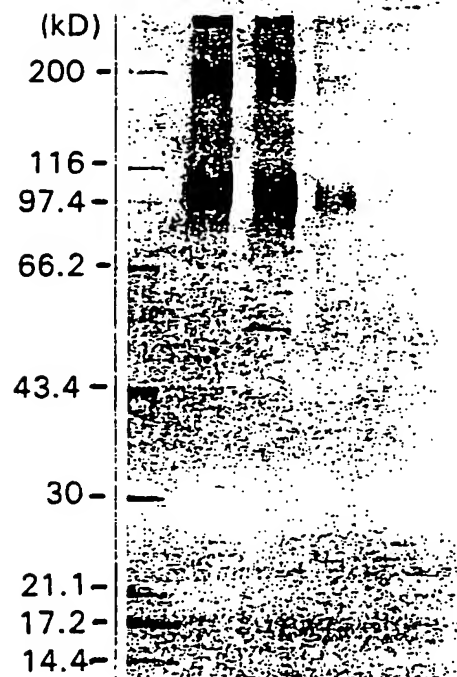


FIG. 21

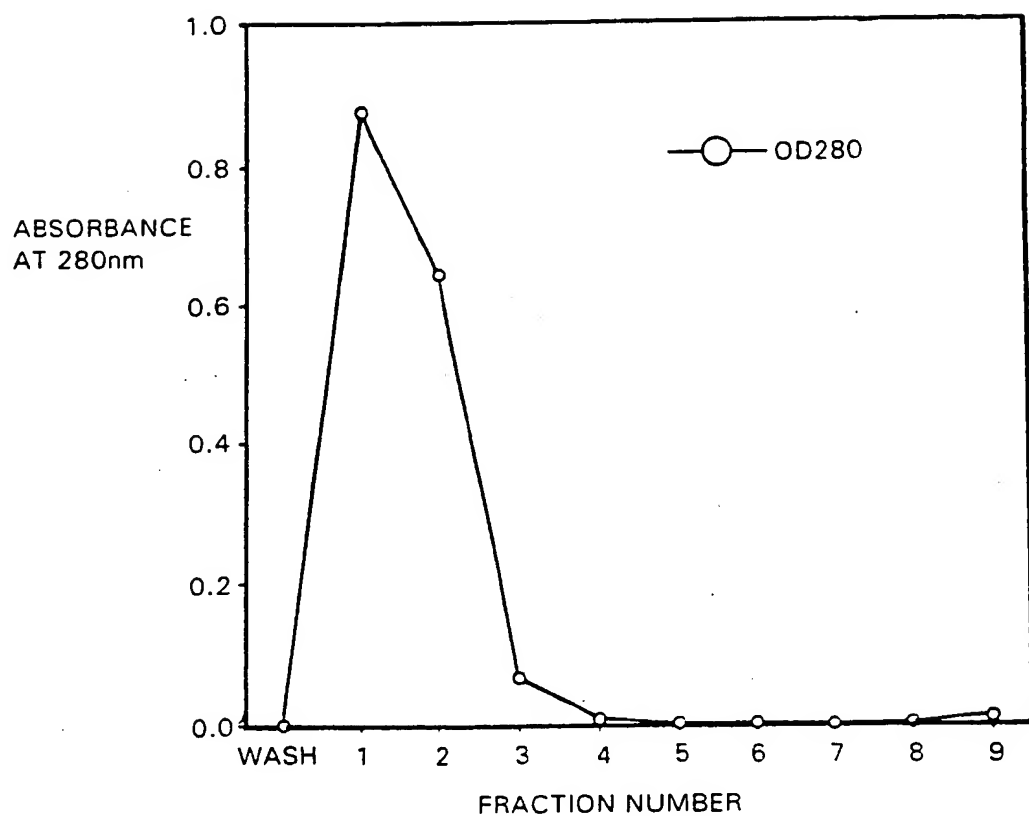


FIG. 20

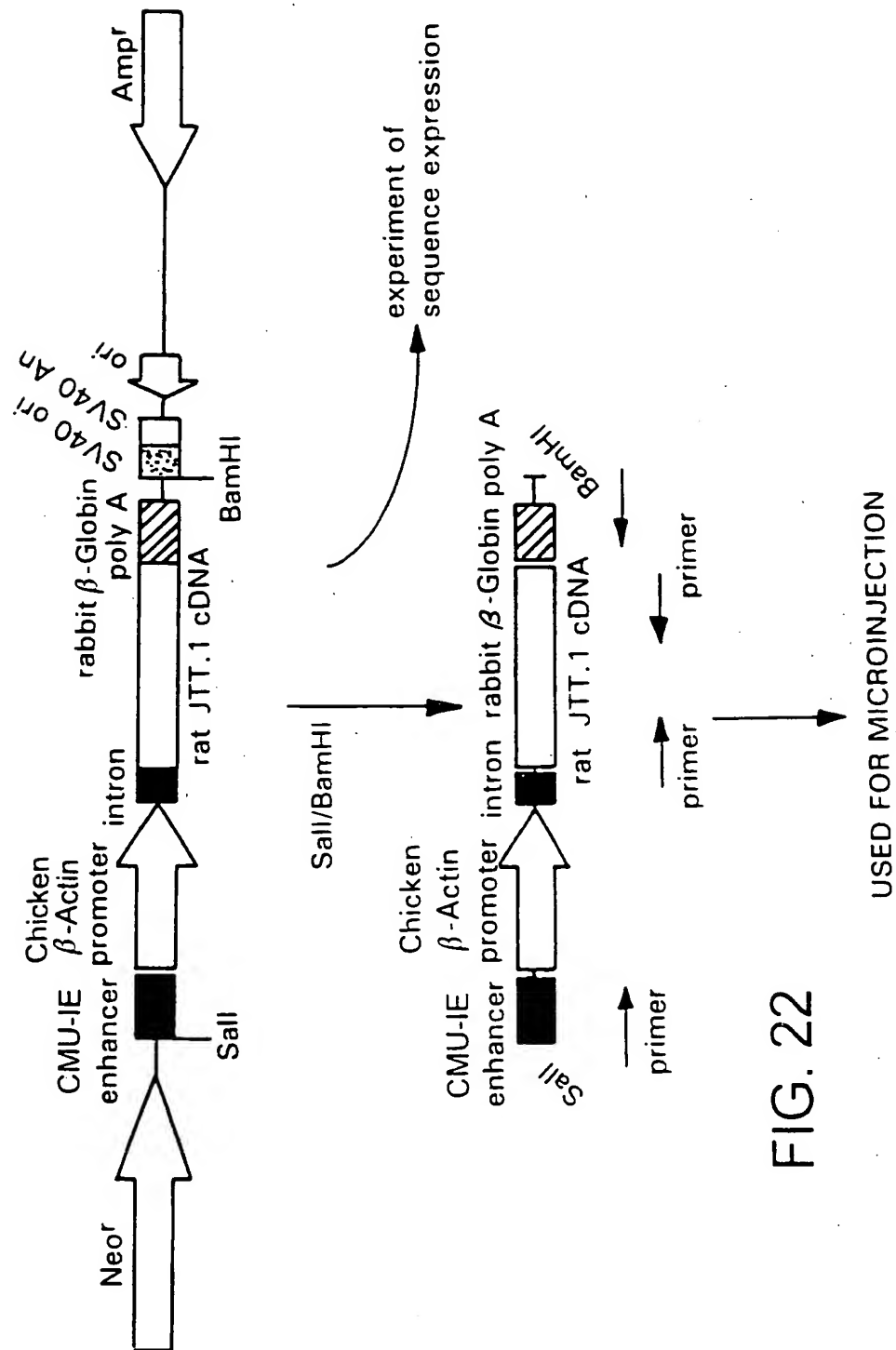


FIG. 22